NOTES ON NEW AND NOTEWORTHY PLANTS. XXXII

Harold N. Moldenke

AEGIPHILA SESSILIFIORA var. CUATRECASASI Moldenke, var. nov. Haec varietas a forma typica speciei pedicellis fructiferis percrassis usque ad 17 mm. longis, calicibus fructiferis campanulatis percrassis usque ad 10 mm. longis et 17 mm. latis verrucosis perspicue lobatis, et drupis carnosis 2 cm. longis latisque recedit.

This variety differs from the typical form of the species in having solitary fruits, the fruiting-pedicels very thick, to 17 mm. long, the fruiting-calyx coriaceous, campanulate, to 10 mm. long and 17 mm. wide, verrucose, and the drupes fleshy, 2 cm. long and wide.

The type of the variety was collected by José Cuatrecasas Arumi and Rafael Romero Castaffeda (no. 25404) in the forest at Hacienda Nuevo Horizonte, El Podrido, Sierra de Perijá, east of Manaure, Magdalena, Colombia, on November 16, 1959, and is deposited in the H. N. Moldenke Herbarium at Yonkers, New York.

AEGIPHILA VITELLINIFLORA var. EGLERI Moldenke, var. nov.

Haec varietas a forma typica speciei calicibus parcissime pil-

osis vel subglabratis recedit.

This variety differs from the typical form of the species in having the calyxes during anthesis very sparsely pilose with long

twisted hairs or subglabrate.

The type of the variety was collected by H. S. Irwin, W. A. Egler, and J. Murça Pires (no. 47162) on riverbanks between Oiapoque and Santo Antonio, on the Rio Oiapoque, Amapá, Brazil, on July 26, 1960, and is deposited in the Britton Herbarium at the New York Botanical Garden. It is named in honor and commemoration of Walter Alberto Egler, whose tragic death by drowning while on a botanical expedition was a great loss to Brazilian botany.

CALLICARPA ERIOCIONA f. GLABRESCENS Moldenke, Résumé Suppl. 4: 9, nom. nud. 1962; f. nov.

Haec forma a forma typica speciei foliis maturitate subtus Parce parcissimeve stellato-pubescentibus vel glabrescentibus recedit.

This form differs from the typical form of the species in having the mature leaf-blades varying from rather sparsely to very sparsely stellate-pubescent or even glabrescent and resinouspunctate on the lower surface.

The type of the form was collected by Takahide Hosokawa (no. 8398) at Tadiu, on Truk island, Caroline Islands, on August 11, 1936, and is deposited in the herbarium of the Bernice P. Bishop

Museum in Honolulu.

ERIOCAULON CONGOLENSE Moldenke, Résumé Suppl. 4: 7, nom. nud.

1962; sp. nov.

Herba parva annua; foliis numerosissimis lineari-filiformibus erecto-patentibus pellucidis glabris fenestratis apiculatis; pedunculis numerosis erectis filiformibus tricostatis stramineis glabris parce contortis; vaginis laxiusculis; capitulis oblongo-

obovatis paucifloris.

Small tufted herb, apparently annual, to 5.5 cm. tall; leaves very numerous, linear-filiform, erect-spreading, 1.3--2.4 cm. long, less than 1 mm. wide, pellucid, glabrous, plainly fenestrate, apiculate at the apex; peduncles several or numerous per plant, erect, filiform, 2.5--5 cm. long, 3-costate, stramineous, glabrous or practically so, slightly twisted; sheaths rather loose, about equaling the leaves and similar to them in texture and color; heads oblong-obovate, 1.5--2.5 mm. wide, 2--3 mm. long, few-flowered; involucral bractlets obovate-elliptic, goldenstramineous, about 2.3 mm. long and 1.4 mm. wide, acute at the apex, glabrous, shiny; receptacle glabrous; receptacular bractlets oblong, about 2.1 mm. long and 0.7 mm. wide, cream-colored, glabrous; staminate florets not seen; pistillate florets: sepals 3, separate, linear, hyaline, about 1.4 mm. long and 0.1 mm. wide; petals 3, separate, linear; ovary subglobose, about 0.5 mm. long and wide, glabrous, 3-sulcate, 3-celled, 3-ovulate; style about 0.5 mm. long, its branches about 0.7 mm. long.

The type of this species was collected by Theodore Monod (no. 11642) at a pond between Handa and Niangara, province of Stanley-Ville, Congo, on July 30, 1956, and is deposited in the herbarium

of the Institut Française d'Afrique Noire at Dakar.

ERIOCAULON GUINEENSE Moldenke, Résumé Suppl. 4: 6, nom. nud. 1962; sp. nov.

Herba annua; foliis rosulatis erectis vel patentibus pauciusculis graminoideis ad apicem attenuatis glabris multostriatis; pedunculis erectis filiformibus stramineis tricostatis paulo contortis valde patenti-pilosis, senectute glabrescentibus; cap-

itulis hemisphaericis albis dense multifloris.

Annual herb, 11,-17 cm. tall; leaves rosulate, erect or spreading, rather few, grass-like, 2-3.5 cm. long, 2-3 mm. wide, attenuate at the apex, several- to many-striate, glabrous; peduncles 5-10 per plant, erect, filiform, stramineous, 10.5-15 cm. long, 3-costate, only very slightly twisted, abundantly spreading-pilose, the hairs wearing off in age; heads hemispheric, 6-8 mm. wide, white, densely many-flowered; involucral bractlets stramineous, obovate, about 3 mm. long and 1 mm. wide, obtuse at the apex, glabrous, shiny; receptacle long-pilose; staminate florets long-pedicellate, the sepals 3, separate, oblong, whitish, about 1.4 mm. long and 0.35 mm. wide, densely white-barbate; petals 3, separate, oblong, whitish, about 1.4 mm. long and 0.35 mm. wide, densely white-barbate; pistillate florets: sepals 3, separate, oblong, hyaline, about 2.8 mm. long and 0.35 mm. wide, acute at the apex, long-ciliate at the apex only,

otherwise glabrous; petals 3, oblong-linear, about 0.7 mm. long and 0.1 mm. wide, densely white-barbate; ovary small, glabrous, about 0.35 mm. long and wide, 3-sulcate, 3-celled, 3-ovulate.

The type of this species was collected by Boismare (no. 386) on wet sandy soil at Toumou, Friguiagbé, Republic of Guinea, on September 13, 1943, and is no. 3904 in the James Chillou herbarium, deposited in the herbarium of the Institut Française d'Afrique Noire at Dakar.

ERIOCAULON HIRSUTULUM Moldenke, Résumé Suppl. 4: 6, nom. nud. 1962; sp. nov.

Herba parva annua; foliis caespitosis graminoideis erectopatentibus viridibus attenuatis glabris nec fenestratis non striatis; pedunculis erectis gracilibus stramineis dense patenteque sericeo-hirsutulis; vaginis laxiusculis multostriatis gla-

bris; capitulis hemisphaericis stramineis.

Small annual herb, 7--9.5 cm. tall; leaves tufted, grasslike, erect-spreading, 1.3--2.2 cm. long, about 1 mm. wide, green, attenuate at the apex, not plainly striate nor fenestrate, glabrous; peduncles erect, slender, 3--8 per plant, stramineous, 6--9.5 cm. long, densely silky-hirsutulous with wide-spreading whitish hairs; sheaths rather loose, 2--2.3 cm. long, green, manystriate, glabrous, the blade short, erect, plainly apiculate at the apex; heads hemispheric, about 3 mm. wide, stramineous; involucral bractlets oblong, stramineous, about 2.3 mm. long and 1 mm. wide, glabrous, shiny; staminate florets: sepals 3, separate, hyaline or whitish, about 0.7 mm. long and 0.2 mm. wide, narrowly oblong, acute at the apex, glabrous; petals 3, separate, hyaline, about 0.9 mm. long, laciniate, glabrous; stamens 6; pistillate florets long-pedicellate, the sepals 3, separate, oblong, hyaline, about 1.4 mm. long and 0.35 mm. wide, acute and pilose at the apex; petals 3, separate, linear, stramineous, about 1 mm. long and 0.14 mm. wide, laciniate at the apex, glabrous; ovary subglobose, about 0.5 mm. long and wide, glabrous, 3-sulcate, 3celled, 3-ovulate.

The type of this species was collected by J. G. Adam (no. 18370) at Asamame, Senegal, on October 8, 1961, and is deposited

in the H. N. Moldenke Herbarium at Yonkers, New York.

ERIOCAULON LATIFOLIUM f. PROLIFERUM Moldenke, Résumé Suppl. 4: 6, nom. nud. 1962; f. nov.

Haec forma a forma typica speciei capitulis plerumque foliaceo-

proliferis recedit.

This form differs from the typical form of the species in having its heads often proliferating into a cluster of leaves 5--20

mm. long.

The type of the form was collected at Lac de Moka, Senegal, on December 9, 1951, and is no. 10358 in the herbarium of the Institute Française d'Afrique Noire at Dakar. This same tendency to vivipary or proliferation is seen in E. brevifolium Klotzsch, E. longifolium Nees, E. modestum Kunth, E. sexangulare L., Paepalanthus capillaceus Klotzsch, P. fasciculatus (Rottb.) Korn., and Syngonanthus caulescens (Poir.) Ruhl.

ERIOCAULON SEXANGULARE f. VIVIPARUM Moldenke, Résumé Suppl. 5: 6, nom. nud. 1962; f. nov.

Haec forma a forma typica speciei capitulis plusminusve vivip-

aris recedit.

This form differs from the typical form of the species in hav-

ing its heads more or less conspicuously viviparous.

The type of the form was collected by Edred John Henry Corner (no. 37693) in mud by a stream at Rengam, Johore, Malaya, on October 22, 1941, and is deposited in the herbarium of the Naturhistoriska Riksmuseum at Stockholm.

LIPPIA MCVAUGHI Moldenke, Résumé Suppl. 4: 4, nom. nud. 1962; sp. nov.

Arbor usque ad 12 m. altus; ramulis gracilibus glabris stramineis; foliis ellipticis vel ovatis regulariter serratis utrinque
glabris nitidisque; inflorescentiis axillaribus solitariis pedunculatis capitatis; pedunculis filiformibus 1.5-4 cm. longis
stramineis glabris; capitulis viridi-albis 1.4-2.5 cm. latis multifloris; bracteis magnis papyraceis ovatis; corollis albis.

Tree, 10-12 m. tall; trunk 25 cm. in diameter at breast height; branchlets slender, gray-stramineous, glabrous, the younger parts obscurely tetragonal; leaves decussate-opposite, numerous toward the tips of the branchlets; petioles very slender, about 1 cm. long, glabrous; leaf-blades thin-chartaceous, shiny-green on both surfaces, elliptic or ovate, 2-6 cm. long, 1-3.5 cm. wide, acute or short-acuminate at the apex, sharply serrate with regular somewhat antrorsely appressed teeth from below the widest part to the apex, cuneate-acuminate at the base, glabrous on both surfaces; midrib very slender, flat above, prominent beneath; secondaries very slender, 5--8 per side, arcuate-ascending, not anastomosing, terminating in the sinuses between the teeth, flat above, prominulous beneath; veinlet reticulation rather sparse and not prominent; inflorescence axillary, near and at the apex of the branchlets, one per axil, opposite and decussate; peduncles filiform, 1.5-4 cm. long, glabrous; heads densely many-flowered, 1.4-2.5 cm. wide; bracts large, ovate, papery, greenish-white, 12--15 mm. long, 6-8 mm. wide at the base, acute at the apex, sessile, densely shortpubescent on both surfaces; corolla white, yellow in the center.

The type of this species was collected by Rogers McVaugh and Walter Norman Koelz (no. 1660) on low mountain summits 7 miles north of Santiago, on the road to Durazno, in deciduous woodlands, growing with Cordia, Brosimum, and Platymiscium, at an elevation of 200 meters, Colima, Mexico, on December 10, 1959, and is deposited in the herbarium of the University of Michigan at Ann Arbor, Michigan. The collectors note that it was abundant at the type locality. It is a pleasure to name this fine plant in honor of my good friend, Rogers McVaugh, who has done such noteworthy work on the taxonomy of vascular plants, especiall of the Lobeliaceae.

MESANTHEMUM CHILLOUI Moldenke, Résumé Suppl. 4: 6, nom. nud. 1962; sp. nov.

Herba parva anmua; foliis rosulatis patentibus membranaceis vel pellucidis apiculatis glabris nitidis; pedunculis nonnullis stramineis filiformibus 4-costatis glabris contortis erectis; vaginis laxiusculis glabris nitidis; capitulis hemisphaericis albis multifloris; bracteis involucri ellipticis stramineis.

Diminutive herb, apparently annual, 3-8 cm. tall; leaves basal, tufted, spreading, membranous or pellucid, 5-9 mm. long, less than 1 mm. wide, apiculate at the apex, glabrous, shiny; peduncles several per plant, stramineous, filiform, 3-7 cm. long, 4-costate, glabrous, twisted, erect; sheaths rather loose, 1-1.5 cm. long, glabrous, shiny, the apical blade lanceolate, about 2 mm. long, apiculate; heads hemispheric, white, 5-7 mm. wide, many-flowered; involucral bractlets elliptic, about 2.1 mm. long and 1 mm. wide, stramineous, obtuse at the apex, glabrous; receptacle glabrous; staminate florets: sepals 3, linear, separate, hyaline, about 1.4 mm. long and 0.17 mm. wide, glabrous; petals 3, connate at the base into a narrow tube, the lobes white, unequal, lingulate, one about 1 mm. long and 0.7 mm. wide, the other two about 0.7 mm. long and 0.35 mm. wide, densely white-pubescent; stamens 6; pistillate florets: sepals 3, linear, hyaline, about 1.4 mm. long and 0.14 mm. wide, separate, glabrous; petals 3, separate, linear, about 1.4 mm. long and 0.14 mm. wide, glabrous.

The type of this distinctive species was collected by James Chillou (no. 716) — in whose honor it is named — on inundated sandstone on the plantation of Mayon-Couré, Friguiagbé, Republic of Guinea, on September 25, 1938, and is deposited in the H. N. Moldenke herbarium at Yonkers, New York. The collector notes that this is one of the first plants to push up on to the imundated bare sandstone substratum after birning of underbrush, forming tufts with many inflorescences.

MESANTHEMUM NECOPINATUM Moldenke, Résumé Suppl. 4: 6, nom. nud. 1962; sp. nov.

Herba parvissima annua; foliis paucis caespitosis ut videtur ephemeris filiformibus pellucidis glabris attenuatis; pedunculis numerosis erectis stramineis 4-angulatis paulo contortis glabris nitidis; vaginis arcte appressis fenestratis viridibus glabris, lamina lanceolata erecta appressa subpellucida attenuata; capitulis cupuliformibus supra albis; bracteis involucri nigris late ellipticis glabris nitidis ad apicem rotundatis.

Very small annual herb, 3-5 cm. tall; leaves few, tufted, apparently ephemeral, filiform, pellucid, 1-2 cm. long, less than 1 mm. wide, glabrous, attenuate to the apex; peduncles numerous, erect, stramineous, 3-5 cm. long, h-angled, somewhat twisted, glabrous, shiny; sheaths loosely appressed, about 1.5 cm. long, fenestrate, green, glabrous, the blade lanceolate, erect, appressed, subpellucid, attenuate at the apex; heads cupuliform, about 4 mm. wide, white from above; involucral bractlets

black, broadly elliptic, about 1.7 mm. long and 1 mm. wide, rounded at the apex, glabrous, shiny; staminate florets: sepals 3, separate, hyaline, linear, about 1 mm. long and 0.1 mm. wide, glabrous; petals 3, connate into a tube about 1.4 mm. long, the free lobes obovate-lingulate and densely white pilose-barbate, two about 0.7 mm. long and 0.5 mm. wide, the third about 1.4 mm. long and 1.2 mm. wide, rounded at the apex; stamens 6; anthers black; pistillate florets: sepals 3, separate, black toward the apex, two carinate on the back, about 1.4 mm. long and 0.5 mm. wide, glabrous, the third obovate, cucullate-concave, about 1.6 mm. long and 1 mm. wide, short-barbate with white hairs at the apex on the back; petals 3, separate, two oblanceolate, about 1.4 mm. long and 0.35 mm. wide, antrorsely white-pilose at the apex on the back, pale-gray, the third about 2.4 mm. long, lingulately expanded at the apex and 0.7 mm. wide, densely white-barbate; ovary subglobose, about 0.5 mm. long and wide, glabrous, 3-sulcate, 3-celled, 3-ovulate; style filiform, about 1.4 mm. long, glabrous.

The type of this species was collected by James Chillou (no. 846) on inundated sandstone on the plantation of Mayon-Couré, Friguiagbé, Republic of Guinea, and is deposited in the herbarium of the Insti-

tute Française d'Afrique Noire at Dakar.

MESANTHEMUM RUBRUM Moldenke, Résumé Suppl. 4: 6, nom. mud. 1962; sp. nov.

Herba elegans annua; foliis parciusculis caespitosis erectis graminoideis breviter apiculatis utrinque plusminusve patentipubescentibus nec striatis non fenestratis; pedunculis gracillimis erectis numerosis aureo-stramineis plusminusve dense pubescentibus vel hirsutulis perobscure bisulcatis vel subteretibus; vaginis arctiuscule adpressis vel paulo laxis obscure striatis paulo contortis dense fulvo-hirsutulis; capitulis primo obconicis, demum

hemisphaericis valde rubris. Elegant apparently annual herb, to 30 cm. tall; leaves rather few, tufted, erect, grass-like, 2.5-3 cm. long, 2-3 mm. wide, short-apiculate at the apex, more or less spreading-pubescent on both surfaces, not striate nor fenestrate; peduncles very slender, erect, 2--6 per plant, 13--30 cm. long, golden-stramineous, more or less densely pubescent or hirsutulous, very obscurely 2-sulcate or subterete; sheaths rather closely appressed or somewhat loose, surpassing the leaves, 5--6 cm. long, obscurely striate, slightly twisted, densely hirsutulous with fulvous hairs, the apical limb ovate, erect, acute at the apex; heads obconic when young, later hemispheric, decidedly red during anthesis; involucral bractlets firm, ovate, dark-brown, about 3 mm. long and 1.5 mm. wide, acute at the apex, with broad lighter margins, densely long-pilose with antrorse hairs on the back; receptacle long-pilose; receptacular bractlets oblong, about 3 mm. long and 0.35 mm. wide, dark-brown toward the apex, barbate with red hairs on the back at the apex; staminate florets: sepals reduced to hairs; petals 3, connate into a filiform tube about 1.4 mm. long, the free lobes lingulate, red, about 0.72 mm. long and 0.35 mm. wide, densely red-barbate; stamens 6; anthers yellow; pistillate florets: sepals apparently

reduced to long hairs, some 2.4 mm. long and surmounted by a magnificent red plume 3-3.5 mm. long; petals 3, connate into a filiform hyaline tube about 1.9 mm. long, surmounted by 3 lingulate red lobes about 0.7 mm. long and 0.35 mm. wide, densely barbate-fringed; ovary globose, about 0.5 mm. long and wide, glabrous, 3-sulcate, 3-celled, 3-ovulate; style filiform, about 0.7 mm. long, glabrous; stigmas 3, minute, erect, papillose or finger-like.

The type of this amazing and beautiful species was collected by James Chillou (no. 1835) on very wet sandstone at the plantation of Mayon-Couré, Friguiagbé, in the valley of Quatamba, Republic of Guinea, on February 10, 1940, and is deposited in the H. N. Moldenke herbarium at Yonkers, New York. The floral morphology of this plant is not clear. Some flower-heads seem to have only a single red plume; others have 2, 3, or more. Whether these are appendages to the receptacular bractlets or to the sepals is not clear. Almost certainly a new genus is here indicated.

PAEPALANTHUS BELLUS Moldenke, Résumé Suppl. 4: 5, nom. nud. 1962; sp. nov.

Herba parva caulescens; caulibus brevibus gracillimis foliosis adscendentibus vel erectis; foliis uniformibus linearibus opacis costatis obtusiusculis versus basin ad marginibus longe pilosis, caeterem glabris; pedunculis filiformibus tricostatis glabris stramineis; vaginis arcte adpressis glabris; capitulis hemisphaericis albidis; bracteis involucri obovatis brunneis.

Small caulescent herb, to about 10 cm. tall; stems short, very slender, leafy, 1--2.5 cm. long, ascending or erect; leaves quite uniform, linear, 1-1.5 cm. long, less than 1 mm. wide, opaque, several-ribbed, rather blunt at the apex, long-pilose on the margins toward the base, otherwise glabrous; peduncles filiform, 4-9 cm. long, 3-costate, glabrous, stramineous; sheaths closely appressed, shorter than the leaves, glabrous, the apical blade rounded or bilobed; heads hemispheric, about 3 mm. wide, whitish; involucral bractlets obovate, dark-brown, about 1.7 mm. long and 0.8 mm. wide, glabrous; receptacle long-pilose; receptacular bractlets oblong, dark-brown, about 1.5 mm. long and 0.5 mm. wide, white-barbate at the apex on the back, otherwise glabrous; staminate florets: sepals 3, separate, obovate, darkbrown, acute at the apex, white-barbate at the apex on the back; petals 3, connate into a hyaline tube about 1.4 mm. long, glabrous; stamens 3; pistillate florets: sepals 3, separate, obovate, dark-brown, acute at the apex, white-barbate on the back at the apex; petals 3, oblong, hyaline, about 1 mm. long, antrorsely long-pilose; ovary subglobose, stramineous, about 0.7 mm. long and wide, glabrous, 3-sulcate, 3-celled, 3-ovulate; style about 0.2 mm. long.

The type of this species was collected by Gert Hatschbach (no. 7391) at Rio Coutinho, municipality of Guarapuava, Parana, Brazil, on October 21, 1960, and is deposited in the H. N. Moldenke books

denke herbarium at Yonkers, New York.

PAEPALANTHUS DIFFISSUS Moldenke, Résumé Suppl. 4: 5, nom. mud.

1962; sp. nov.

Herba; foliis dense rosulatis adscendentibus 6-10 cm. longis, ad basin usque ad 1 cm. latis, supra leviter subtus densissime villosis; pedunculis 12-15 cm. longis erectis complanatis multi-striatis minute puberulis versus apicem fissis; capitulis 1--3

per diviso pedunculorum.

Herb; stems apparently thick but abbreviated, very densely leafy; leaves densely cespitose, erect or ascending, 6-10 cm. long, lanceolate, to 1 cm. wide at the base, uniformly tapering to the mucronulate apex, sparsely villosulous above, very densely sordid-villous beneath; peduncles 2-6, erect, 12--15 cm. long, flat, many-sulcate, very minutely puberulous, divided toward the apex into 2--4 divisions of equal or very unequal length, each terminated by a head of flowers; individual flower-heads more or less obconic or hemispheric, 4--9 mm. wide, gray; involucral bractlets numerous, closely imbricate, ovate-lanceolate or triangular-ovate, 2.5--3 mm. long, 1--2 mm. wide, abruptly acuminate from the broad base, ciliolate along the margins, otherwise glabrous and shiny; receptacle long-pilose; receptacular bractlets broadly elliptic, dark-brown, about 2.4 mm. long and 1 mm. wide, acute at the apex, white-barbate on the back at the apex; staminate florets: sepals 3, dark-brown, separate, oblanceolate or obovate, 1.9-2.4 mm. long, 0.8-1.4 mm. wide, acute or very shortacuminate at the apex, densely white-barbate on the back at the apex; petals 3, hyaline, forming a tube about 1.7 mm. long; stamens 3, included; pistillate florets not seen.

The type of this species was collected by Vareschi (no. 5357) in Espeletieta graminosa, at 3200—3600 meters altitude, Po. El Batallon, Táchira, Venezuela, on October 3, 1956, and is deposit-

ed in the Herbario Nacional de Venezuela at Caracas.

PAEPALANTHUS MUSCOSUS var. TACHIRENSIS Moldenke, Résumé Suppl. 4: 5, nom. nud. 1962; var. nov.

Haec varietas a forma typica speciei pedunculis usque ad 12 cm. longis, caulibus usque ad 13 cm. longis, et foliis usque ad

1.7 cm. longis recedit.

This variety differs from the typical form of the species in having its peduncles to 12 cm. long, the stems to 13 cm. long,

and the leaves to 1.7 cm. long.

The type of the variety was collected by Vareschi in Espeletieta graminosa, at an altitude of 3100 meters, at Po. El Batallon, Tachira, Venezuela, on March 10, 1956, and is deposited in the Herbario Nacional de Venezuela at Caracas.

PAEPALANTHUS POLYTRICHOIDES var. DENSUS Moldenke, Résumé Suppl. 5: 5. 1962; var. nov.

Haec varietas a forma typica speciei foliis densissimis arcte

adpressis imbricatisque recedit.

This variety differs from the typical form of the species in having its leaves extremely dense, very closely appressed, and tightly overlapping during anthesis.

The type of this variety was collected by José Cuatrecasas Arumi and Roberto Jaramillo Mejía (no. 25737) around the Laguna de Chisacá, at an altitude of 3650 to 3700 meters, on the Paramo de Chisacá, Macizo de Bogotá, Cundinamarca, Colombia, on December 29, 1959, and is deposited in the H. N. Moldenke herbarium at Yonkers, New York.

PREMNA TAITENSIS var. VITIENSIS Moldenke, Résumé Suppl. 4: 9 and 5: 6, nom. nud. 1962; var. nov.

Haec varietas a forma typica speciei venis primariis foliorum

laminorum subtus plusminusve barbato-hispidulis recedit.

This variety differs from the typical form of the species in having its leaf-blades more or less barbate along the midrib and sometimes also along the secondaries beneath. It differs from var. rimatarensis F. H. Br. in having the leaf-blades averaging narrower, usually more ovate in outline, and usually more tapering at the apex in attenuate-acute or subacuminate fashion. In var. rimatarensis the leaf-blades are usually more subrotund or oblong in shape, usually abruptly acute or obtuse in submucronate fashion at the apex in the style of P. obtusifolia R. Br.

The type of the variety was collected by Albert Charles Smith (no. 7029) at the edge of a forest, at an altitude of 100 to 200 meters, in the vicinity of Ndakuivuna, in the hills east of the Eainimbuka River, Tailevu, Viti Levu, Fiji Islands, between April 14 and 26, 1953, and is deposited in the H. N. Moldenke herbarium

at Yonkers, New York.

It seems probable that Brown's var. marchionica, var. rapensis, and var. rimatarensis are actually varieties of P. mariannarum Schau., and also that P. gaudichaudii Schau. is merely a luxuriant variety or form of P. obtusifolia. However, not having as yet seen the actual types of P. taitensis, P. mariannarum, or P. gaudichaudii, I hesitate to make the transfers at this time. It is also not at all clear to me why P. integrifolia L. should not be retained as the valid name for what is now passing as P. obtusifolia. The P. Nelson collections distributed and annotated by E. D. Merrill as "TOPOTYPE, typical of Premna gaudichaudii Schauer" seem to be typical P. mariannarum.

SPHENODESME SMITINANDI Moldenke, Résumé Suppl. 5: 6, nom. nud.

Frutex scandens; ramis subtetragonis glabris; ramulis puberulentis; nodis annulatis; foliis decussatis; petiolis gracilibus
6—9 mm. longis strigilloso-puberulentibus; laminis chartaceis
ellipticis 7.5—10.5 cm. longis 1.5—3.5 cm. latis, ad apicem acutis vel acuminatis, integris, ad basin rotundatis, supra sparsissime strigillosis vel glabrescentibus nitidis, subtus dense pubescentibus; inflorescentiis terminalibus paniculatis; bracteis involucri 6 oblanceolatis usque ad 18 mm. longis et 6 mm. latis utrinque strigillosis; corollis caeruleis.

Woody climber; stems subtetragonal, gray, glabrous; branchlets

slender, subtetragonal, densely brown-puberulent; nodes annulate; principal internodes 2.5--7 cm. long; leaves decussate-opposite; petioles slender, 6--9 mm. long, strigillose-puberulent with antrorse hairs; leaf-blades chartaceous, dark-green above, lighter beneath, elliptic, 7.5--10.5 cm. long, 1.5--3.5 cm. wide, acute or acuminate at the apex, entire, rounded at the base, very sparsely strigillose or glabrescent above, densely brown-pubescent beneath; midrib slender, flat above, prominulous beneath; secondaries slender, about 3 per side, ascending, flat above, slightly prominulous beneath; veinlet reticulation abundant, forming a rather conspicuous network; inflorescence terminal on the branchlets, paniculate, and also a few small cymes in the axils of the uppermost leaves; panicle about 23 cm. long and 12 cm. wide; cymes pedunculate, about 5 cm. long and 3 cm. wide; sympodia tetragonal, slender, densely brownish-strigillose; peduncles very slender, about 1.5 cm. long, brown-strigillose; sympodia 1--3 cm. long; involucral bracts 6, oblanceolate, to 18 mm. long and 6 mm. wide during anthesis, densely strigillose on both surfaces, rounded at the apex; calyx cupuliform, about 4 mm. long and wide, densely canescent-puberulent, the rim conspicuously lobed; corolla blue.

The type of this species was collected by my good friend and colleague, Tem Smitinand (no. 4852) — in whose honor it is named — scattered in an old clearing at Rachasima, Pak Chawng, at an altitude of about 200 meters, in eastern Thailand, on September 4, 1958, and is deposited in the H. N. Moldenke herbarium at Yonkers, New York.

STACHYTARPHETA INCANA var. JALISCANA Moldenke, Résumé Suppl. 4: 4, nom. nud. 1962; var. nov.

Haec varietas a forma typica speciei bracteolis angustissime

lineari-lanceolatis et corollis albis recedit.

This variety differs from the typical form of the species in having its bractlets very narrowly linear-lanceolate, except for

the very base almost filiform, and the corollas white.

The type of the variety was collected by Rogers McVaugh (no. 19919), who says that it was locally abundant in wooded ravines in the mountains north of Autlan, 3-5 miles above Mina San Francisco (Cia. Minera de Autlan), in the tropical deciduous forest zone with Bursera, Ceiba, Ipomoea, and Triumfetta, at 1500-1650 meters altitude, Jalisco, Mexico, collected on October 5, 1960, and deposited in the herbarium of the University of Michigan at Ann Arbor. The collector notes that it is a shrub 1.5 m. tall.

Herba parvissima acaulescens; foliis rosulatis linearibus glabris nitidis apiculatis, ad basin densissime albo-lanato-pulvinellis; vaginis arcte adpressis griseis tenuiter membranaceis multistriatis paulo contortis glabris; pedunculis solitariis gracillimis erectis laxe longeque pilosis tricostatis paulo contortis; capitulis subglobosis griseis; bracteis involucri membranaceis lanceolatis aristatis.

Dwarf acaulescent herb, forming tufts; leaves rosulate, linear, 1—2 mm. long, glabrous, shiny, apiculate at the apex, with a very dense and conspicuous cushion of white wool at the center of the rosette; sheath closely appressed, 5—7 mm. long, gray, thin-membranous, many-striate, slightly twisted, glabrous, its rim oblique, not at all spreading, somewhat laciniate, not pilose; peduncles solitary, 2.5—3 cm. long, erect, very slender or filiform, loosely long-pilose, 3—angled, slightly twisted; heads solitary, subglobose, 3—4 mm. long and wide, gray; involucral bractlets membranous or subhyaline, lanceolate, about 1 mm. long, aristate at the apex, broadly white-margined, with a dark central midrib leading into the apical point, glabrous on both surfaces; receptacle pilose.

The type of this very distinct and unmistakable species was collected by Bassett Maguire, Geraldo Mendes Magalhães, and Celia K. Maguire (no. 49183), occasional on sandstone on the road between Diamantina and Gouveia, Minas Gerais, Brazil, on August 12, 1960, and is deposited in the Britton Herbarium at the New York Botanical Garden.

SYNGONANTHUS XERANTHEMOIDES var. GRAHAMAE Moldenke, var. nov.

Haec varietas a forma typica speciei foliis temuiter chartaceis submembranaceis flaccidis 5--9 cm. longis 0.5--2 mm. latis ad apicem attenuatis recedit.

This variety differs from the typical form of the species in having its leaves during anthesis thin-chartaceous or submembranous, flaccid, 5-9 cm. long, 0.5-2 mm. wide, and gradually narrow

ed to the attenuate apex.

The type of the variety was collected by V. Graham (no. 154) — in whose honor it is named — on brown sand at the Mahdia gold-field, Potaro River, British Guiana, on July 31, 1958, and is deposited in the herbarium of the Royal Botanic Gardens at Kew.

MATERIALS TOWARD A MONOGRAPH OF THE GENUS VERBENA. VII

Harold N. Moldenke

VERBENA L.

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